

CLAIMS

1. A method for monitoring the amount of cycles attributable to an induction coil comprising the steps of:
 - providing an induction coil with a counting sensor;
 - generating a magnetic field about said induction coil ; and
 - triggering said counting sensor when said magnetic field is generated.
2. The method of claim 1, wherein said counting sensor comprises a sensor for receiving and outputting counting data.
3. The method of claim 2, wherein said counting sensor is removably attached to said induction coil.
4. The method of claim 2, wherein said counting sensor is embedded within said induction coil.
5. The method of claim 2, and further comprising the step of:
 - 15 said counting sensor consecutively counting each time said sensor is triggered.
6. The method of claim 2, and further comprising the step of:
 - reading said counting data from said counting sensor.
7. The method of claim 5, and further comprising the step of:
 - 20 reading said counting data from said counting sensor.
8. The method of claim 1, wherein said counting sensor is an identifier of said induction coil, and further comprising the step of: said identifier triggering an external data source to consecutively count each time said induction coil is cycled.
9. The method of claim 8, wherein said counting sensor is removably attached to said induction coil.
10. The method of claim 8, wherein said counting sensor is embedded within said induction coil.
11. The method of claim 8, and further comprising the step of:
 - 30 reading said counting data from said external source.
12. A method for monitoring the amount of cycles attributable to an induction coil of an induction coil assembly, said assembly comprising a

power supply and an induction coil subassembly including said induction coil and a bus bar connecting said coil to said power supply, the method comprising the steps of:

- providing an induction coil subassembly with a counting sensor;
- 5 wherein said counting sensor comprises a sensor for receiving and outputting counting data;
 - generating a magnetic field about said coil ;
 - triggering said counter when said magnetic field is generated; wherein said counting sensor consecutively counts a cycle each time said
 - 10 magnetic field is generated about said coil;
 - maintaining said coil within said induction coil subassembly and continuing to consecutively count said cycles until said coil fails;
 - reading said output data of said counting sensor; wherein said output data comprises the total amount of consecutive cycles sustained by
 - 15 said coil; and
 - establishing a baseline lifespan for said coil based on said output data.
- 13. The method of claim 12, and further comprising the steps of:
 - providing a series of like induction coil subassemblies each with
 - 20 said counting sensor;
 - generating a magnetic field about each coil of said induction coil subassemblies;
 - triggering each of said counting sensors when said magnetic field is generated;
 - 25 maintaining each of said coils within said induction coil subassemblies and continuing to consecutively count said cycles until each of said coil fails;
 - reading said output data of each said counting sensors; wherein said output data comprises the total amount of consecutive cycles sustained
 - 30 by each of said coils; and
 - establishing an average baseline lifespan for said like coils based on said output data.

14. The method of claim 12, and further comprising the step of: replacing said coil with a new coil upon said failure.
15. The method of claim 13, and further comprising the steps of:
 - 5 coils, replacing at least one of said coils with a new like coil upon said failure, wherein said new coil comprises a counting sensor including a sensor for receiving and outputting counting data;
 - monitoring said consecutive cycles sustained by said replaced coil by reading said output data; and
 - 10 recommending replacing said replaced coil prior to failure of said coil if said cycles are within a pre-determined range of said average baseline lifespan for said like coils.
16. The method of claim 12, wherein said counting sensor is removably attached to said bus bar.
- 15 17. The method of claim 12, wherein said counting sensor is embedded within said induction coil subassembly.
18. The method of claim 15, further comprising the step of: replacing said replaced coil with a new coil having a counting sensor including a sensor for receiving and outputting counting data.
- 20 19. A method for monitoring the amount of cycles attributable to an induction coil of an induction coil assembly comprising a power supply and an induction coil subassembly comprising said induction coil and a bus bar connecting said induction coil to said power supply, wherein an average baseline lifespan for said induction coil has been established, the method comprising the steps of:
 - 25 providing said induction coil subassembly with a counting sensor; wherein said counting mechanism comprises a sensor for receiving and outputting counting data;
 - providing a magnetic field about said coil ;
 - 30 triggering said counting sensor when said magnetic field is generated; wherein said counting sensor consecutively counts a cycle each time said magnetic field is generated about said coil;

reading said output data of said counting sensor; wherein said output data comprises the total amount of consecutive cycles sustained by said coil;

- monitoring said consecutive cycles sustained by said coil by
5 reading said output data; and

recommending replacing said coil prior to failure of said coil if said cycles are within a pre-determined range of said average baseline lifespan for said like coils.

20. The method of claim 19, wherein said counting sensor is
10 removably attached to said bus bar.

21. The method of claim 19, wherein said counting sensor is embedded within said induction coil subassembly.

22. The method of claim 19, wherein said counting sensor is triggered by a change in voltage across said induction coil subassembly when
15 said power supply is activated.

23. The method of claim 19, wherein said counting sensor is triggered by any one of the following events when said magnetic field is generated about said induction coil: a temperature differential, a current flow differential, a frequency differential, or a magnetic field differential causing a
20 Hall effect.

24. The method of claim 19, further comprising the step of:
replacing said replaced coil with a new coil having a counting sensor including a sensor for receiving and outputting counting data.